MUSIC TECHNOLOGY (SOUND ENGINEERING) SUMM ER INDEPENDENT LEARNING

YEAR 12-13



# TOPIC 1 – LIVE SOUND PREPARATION/RESEARCH

- Research and explain the following terms and how they relate to live sound;
- function of multi-speaker arrays, e.g. 2 way, 3 way
- array design, e.g. ground stacks, flown line array
- dynamic drivers
- horn loading
- Impedance
- output wattage (root mean square (RMS)/peak)
- active and passive.





# TOPIC 1 - LIVE SOUND PREPARATION /RESEARCH

- Continue your research and explanation on the following;
- Power amplifiers how to choose appropriate power amplifiers for a live sound system:
- output wattage (RMS/peak)
- Impedance
- digital and solid state designs.

- Explain what you would expect each one of these roles to be responsible for. Make sure you do this in class notebook.
- FOH engineer.
- Monitor engineer.
- Backline technician.
- Road manager.
- Roadie.
- Stage manager.

#### TOPIC1- LIVE SOUND PREPARATION /RESEARCH

### LIVE SOUND SYSTEM DESIGN FOR STADIUMS

https://www.youtube.com /watch?v=tjUKD4tuFMc



#### TOPIC 1 - LIVE SOUND PREPARATION/RESEARCH



Why is it important perform a soundcheck at a concert? Write all the reasons you can think of.



What are some of the health and safety concerns regarding setting up live sound? Write a list of all the things that could potentially go wrong.



Why do you think it is important to carry out a risk assessment when planning a live sound set up?

# TOPIC 2 - DAW PRODUCTION PREPARATION

- What is the Nyquist Theorem? Explain and include your own drawing to represent the theory.
- What can altering the bit depth/sample rate change on a project?
- Explain 'Step Input'.

## DAW PRODUCTION TASK 2 - CREATING AND PRODUCING MUSIC TO A BRIEF VIDEO

Watch the video and make notes on any useful processes seen in the video.

https://www.youtube.com/watch? v=SWFEig6Is\_0&t=1202s



#### DAW PRODUCTION TASK 3 - THEORY

- What is the difference between a major and minor chord?
- What notes do you need to play the following chords? C major, A minor, F major, G major?
- Write out a C major scale what notes do you need?
- What is a key?
- Imagine you have been asked to write a piece of music for a horror movie. Would you use a major or minor key?

#### DAW PRODUCTION TASK 4 -READING

- Follow the link below to 'The MIDI Manual'. Read pages 1-12. (Chapter 1 - What is MIDI?). This has some great explanations of things and will really help with your understanding of how MIDI works for the DAW unit.
- Summarise the text by making notes in class notebook so you can access it and revise from it next year.
- https://www.google.co.uk/books/edition/The\_MIDI\_Manual/ZT Wv1fAMm6MC?hl=en&gbpv=1&dq=working+with+midi&prin tsec=frontcover